

## Spectacular forested valleys at Haute Yate.

Before *Derwent* left Lautoka, Nan Rothwell and John Brown headed back to New Zealand. Prior to departing on 17 August, another naturalist, Maria Hansby, joined the crew for the leg to New Caledonia, sailing via Port Vila and the Loyalty Islands.

By mid August the south east trades were blowing savagely. This wind pattern had set in some weeks previously, well before we had arrived in Suva. We were thankful that we had the wind behind us for the next leg of the voyage westwards to Vanuatu. It was a brisk downwind sail in huge seas the 900 kilometres to Port Vila. The passage took just under four days.

We were holed up in Port Vila for about a week, watching the rain tumbling down and listening to the wind blowing incessantly through the rigging. A planned foray northwards to Port Sandwich, near the



The flightless kagu, New Caledonia. This individual was one of a number of birds that had been successfully raised in captivity. Recently some of these birds have been released back into the wild at Haute Yate.



*Parasitaxis ustus*, a parasitic podocarp, known from only a handful of localities in southern New Caledonia. This one was growing in the Haute Yate Reserve.

southern tip of the little known island of Malekula had to be abandoned.

When we finally did get a reasonable break in the weather, only a day or two before we were due to set sail for the Loyalty Islands, we took the opportunity to make some bird surveys in the forests above Radier, a locality on the shores of Havannah Harbour. It was here that we encountered our first megapodes.

From Vila *Derwent* headed southwards the 300 kilometres to Lifou, the large central island of the French administered Loyalty Group. The main reason for visiting Lifou was to look at the status of its three endemic silvereyes. The most extraordinary of these is the large Lifou silvereye — a species which lacks the eye ring, so distinctive in most members of the genus *Zosterops*. It is aptly named *Z. inornata*. This species seems to spend most of its time in the thick undergrowth and shrub layers of the forest.

The other distinctive silvereye is the small Lifou silvereye, which seems to be a canopy inhabitant. The remaining silvereye on Lifou is a handsome black faced subspecies of our grey-backed silvereye.

Many of the other forest birds were the same species that occur on mainland New Caledonia, which lies only about 100 kilometres away to the west.

From Lifou it was only a short overnight voyage to the Havannah Passage — the main reef entrance for vessels approaching Noumea from the east.

The coastal forests of new Caledonia appear most spectacular from seaward. These are dominated by lofty *Araucaria* pines, which form dense stands in places. On closer inspection one finds cycads growing in the understorey — you could have been wandering through a forest on ancient Gondwanaland.

The hinterland of the main island — or La Grande Terre as the locals call it — appears to be severely eroded and

extraordinarily barren. This is the serpentine country, which has its own unique flora.

When we arrived in Noumea on 1 August, we were greeted by Yves Letocart, a ranger from the Service des Eaux et Forêts. This contact with the forestry people had been arranged for us by the New Zealand High Commission in Noumea. We were also greeted by three new expedition members, George Schischka, and Tony and Annette Habraken.

A day or two later we headed inland with Yves to the magnificent 16 000 ha forest park at Haute Yate, which is about an hour's drive from Noumea. Much of the country near Noumea is disappointingly barren and rocky. However not far inland, the Haute Yate area has extensive tracts of diverse forests.

New Caledonia has some 3500 species of plants, of which 80 percent of the species are endemic. This is twice the number of species we have in New Zealand, all occurring in an area the size of Northland. New Caledonia is a botanist's paradise with many relict species, some with highly localised distributions.

One of the main reasons for our visit to Yate was to see the habitat of the endangered endemic bird the kagu, *Rhynocetos jubatus*. This area is now one of the species' strongholds.

This flightless relative of our extinct *Aptornis* probably now numbers only a few hundred individuals in the wild. Pigs are quite numerous at Yate. We saw plenty of sign where wild pigs had been feeding, and one of the foods they were taking was the large *Placostylus* snail, a preferred food of the kagu.

In Noumea there is a captive breeding programme for the kagu, and so far about twelve birds have been raised in captivity.

Tubenoses such as the Tahiti and New Caledonian petrels breed on the higher ridges at Yate. However pigs and feral cats